ANNUAL REPORT

TO

THE MEMBERS

OF THE

WILLENHALL

URBAN DISTRICT COUNCIL,

BY

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MEDICAL OFFICER OF HEALTH.

February 15th, 1909.

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Summary of Vital and Mortal Statistics for 1908.

Area...	1,249 acres.
Population :—	
Census, 1901	18,515
Estimated, 1908	19,684
Estimated mean, 1895—1908	18,611
Estimated mean, 1875—1894	16,605
Number of Inhabited Houses :—	
Census, 1901	3,614
Estimated, 1908	3,834
Average Number of Persons per House ...	5·1
Density	15·7 per acre.
Births	576
Birth-rate	29·2
Deaths	281
Death-rate	14·2
Zymotic Death-rate	1·3
Infantile Mortality per 1,000 Births registered	159·7

Medical Officer's Annual Report.

1908.

Mr. Chairman and Gentlemen,

Willenhall lies in a broad, shallow, upland Valley, 400 to 445 feet above the sea level, with a general fall of the land to the South East, the land rising gradually on the North as far as Essington Windmill, and on the South as far as the range of hills from Dudley to Sedgley Beacon. The winds are usually therefore strong and bracing, and there is less fog than in most places in the Midlands at a lower altitude. The sub-soil as it is found to day consists for the most part of a heavy clay or clay mixed with gravel, or shale excavated from coal and iron-stone mines ; each being almost impervious to water. The sub-soil is therefore damp in many places, notwithstanding natural advantages, which to some extent favour surface drainage. It is an industrial town, surrounded by other industrial towns—hence there is smoke enough in the air to limit the amount of sun-light it would otherwise have. The climatic conditions of the year as a whole were favourable to good health, though there was, especially during the last months, a greater humidity of the atmosphere than I ever remember here. This humidity, associated with comparatively warm weather, kept in the air a good deal of the viscid tarry materials given off with smoke, and probably favoured the propagation and spread of the seeds of some of the infectious diseases.

The inhabitants are chiefly engaged in making locks, keys, bolts and brass and iron castings. There is no residential population. The lock trades were bad throughout the year, and the casting trades were bad in the last half of it. This means that whilst there was probably not much extreme poverty, the resources of the artisan class were crippled ; a statement which seems to be proved by the fact that 46 persons from the town died in public institutions outside the town, chiefly in the Union House, the largest number ever recorded ; and of this number exactly one half were over 60 years old.

My calculations are based on an estimated population of 19,684, living in 3,834 houses ; arrived at by allowing 5·1 persons to each house, as at the last Census ; and adding 131—the estimated proportion of inmates of the Union House, from the township.

There were 576 births and 281 deaths registered in the District, equal to a Birth-rate of 29·2 and a Death-rate of 14·2 per thousand per year ; as compared with an average of 34·3 and 17·4 in the ten preceding years. The Birth-rate was considerably below that of any year of which I have a record. The Death-rate was lower than in any year since 1851, except the years 1905 and 1907. The Death-rate from the seven principal zymotic diseases was 1·3 per thousand per year ; as compared with an average of 2·4 in the ten preceding years ; and was only twice lower in any year since 1883. The net Death-rate of all belonging to the District was 16·6 per thousand per year—that is to say including those who died in public institutions beyond it.

Ninety-two children died under one year old, equal to a rate of 159·7 per 1000 births registered ; as compared with an average of 170·5 in the ten preceding years. The death rate amongst children illegitimately born was 9½ per cent greater than amongst those legitimately born. The principal causes of death were Atrophy, Debility, Wasting 25 ; premature birth, 12 ; non-tubercular lung affections, 12 ; infectious diseases, 11 ; tubercle, 5 ; suffocation by being overlain, 1 ; convulsions and meningitis, 13 ; and inherited vicious disease, 1. Diarrhœa is by far the most fatal infectious disease amongst infants, and the number of cases in any given year

largely depends upon the climatic conditions which prevail in the months of July, August and September. The climatic conditions in those months in 1908 were more than usually favourable to the non-production of the disease ; hence to some extent the comparatively small number of deaths from that cause. By reference to Table 5 it will be seen there was no death from Diarrhœa of a child under two months old ; probably due to the fact that the younger infants are more often breast-fed than the older ones, and therefore less exposed to the risk of contracting the disease. As it is known that at one Childrens Hospital 96 per cent of the fatal cases of Diarrhœa are amongst hand-fed children, and chiefly in three months of the year ; and that the deaths in Willenhall from that cause during a series of years have largely preponderated amongst the hand-fed, the remedies seem to be, firstly, improved sanitary surroundings, and secondly, *the operation of educational forces in the home, by means of trained lady health visitors, and nurses possessing tact and having experience in the management of the young.* As regards the first remedy, much has been done in recent years ; still more remains to be done ; and the importance of its being done cannot be better emphasized than by stating what is believed to be a fact, that a single house-fly can carry many thousands of disease germs, bred in filth, from filth to the milk and sugar food-supply of infants. Where-ever there are excremental products, decaying food stuffs or waste vegetable materials, there, flies are able to breed ; and no stronger argument can be adduced in favour of the substitution of wash-down water closets for the older conservancy methods ; or for the storage of house refuse in closed receptacles and the removal of the refuse there-from at very short intervals to the country well away from houses ; or to some place nearer at hand, where it can be effectually cremated. As regards the second remedy, there appears to be a glimmer of hope that we are on the eve of a start being made, which should " intensify the sense of parental responsibility, especially so far as the fathers are concerned, and . . . . . raise the whole status of motherhood as the most sacred and beautiful thing in the world." At present every health authority is handicapped in its endeavours to diminish infantile mortality, because of the prevailing ignorance of many parents in the management of their off-spring.

The cases of Infectious Disease certified were :—Diphtheria 22, Erysipelas 14, Scarlet Fever 107 and Enteric Fever 8 ; whilst of non-notifiable Infectious Diseases there came to my knowledge :— Measles 12, Chicken Pox 147, Whooping Cough 171, Mumps 50, Diarrhœa 37 and Influenza 39. Of these 4 died from Scarlet Fever, 5 from Whooping Cough, 1 from Measles, 7 from Diphtheria, 1 from Enteric Fever, 8 from Diarrhœa and 9 from Influenza, 6 of the latter occurring *in* the Union House.

The cases of Diphtheria were more numerous than in any year since the Notification Act was adopted in 1893 ; the type of the disease was in the main severe, and the deaths caused by it were more numerous than in any year since 1872, beyond which I have no record. Out of the 21 premises infected, defects were found, increasing the liability to the disease in 15 cases ; and of these 15, nuisances have been remedied on 13 premises, partly remedied on one premise, and I suggested that a notice of abatement be served in the other case. The drains and sewers in Summer Street, where three houses were infected, will in my opinion need the careful attention, both of the Sanitary Inspector and Surveyor, especially in times of storm, to prevent recurrence of the disease in that locality. In response to my repeated representations, that in certain cases, anti-diphtheritic serum should be provided free of cost, the Clerk after conference with me wrote on November 6th, "My Council have decided that in future they will pay to Medical Practitioners a sum not exceeding 10/- to cover the cost of Anti-diphtheritic Serum used to patients whose circumstances do not enable them to provide such Serum for themselves. It must be understood that the Council accept no responsibility beyond that of making the payment in suitable cases, and that this undertaking is to extend only to patients residing in houses of not more than 6/- per week gross rental value ; and that the Medical man in attendance must be reasonably satisfied that the case is one in which, having regard to the pecuniary position of the patient or his friends, the Serum may be fairly and properly supplied free. Please note that 10/- per patient only will be paid, notwithstanding the fact that two or more injections might be necessary in every particular case."

The cases of Scarlet Fever, although numerous, were not exceptionally severe. As no Isolation Hospital has been provided they were all treated at home, and attempts were made in each case to get the most effectual isolation possible, with the means at command. A laundry woman discontinued work on infected premises; a publican made satisfactory provisions for keeping the infected person and nurse from the public parts of the house; a woman was confined in a house, where a child was suffering from the disease, and the midwife in attendance was prevented from attending other women, until a substitute had been found, and everything pertaining to herself and her instruments had been thoroughly disinfected; satisfactory isolation was obtained on a tailor's premises, and at Walsall Street Post Office; a post office clerk, employed at the Central Post Office, who lived on infected premises, was prevented from attending to her duties; and a small grocer and general dealer's shop was closed most of the day, whilst the mother nursed the patient, and the father attended to the business in the evening, after his other work was done. Several cases notified by Teachers as Measles were found to be Scarlet Fever. In every possible case the bed and clothing were disinfected by the steam disinfector.

With regard to Enteric Fever, one case occurred where the sewer was found to be blocked, and the nuisance was at once abated; a great nuisance from a street sewer-ventilator was the probable cause in another case, which was temporarily abated; a man whose occupation was filthy and whose personal habits left much to be desired died from the disease, and from him a child in the same house contracted the disease, also the child of a laundry woman who had assisted in washing his clothing; whilst the other three premises were in good sanitary order. The bed and bed clothing in all these cases were disinfected by the steam disinfector.

In consequence of the prevalence of Whooping Cough, chiefly at one part of the town, the Managers of the Portobello Council Schools closed the Infant Department about November 24th, and the Mixed Department about December 11th. Previous to the closure, I had not thought it necessary to advise closure by the Council on *sanitary* grounds; but I intimated my willingness to certify the facts, if the

Managers on other grounds decided on closure, in order that they might obtain the advantage conferred by Article 45 *(b)* of the Education Code. The Russell Street Council Schools were closed on my advice for one day in consequence of the prevalence of Mumps amongst the children attending there. Both these schools were during closure disinfected and cleansed.

As regards the other cases of Infectious Disease, I don't propose to make special comment ; but I write with a keen sense of responsibility, and invite the serious attention of the Council, the County Council, the Local Government Board, and the Board of Education to the following remarks on the incidence of infectious disease generally in this town, and the possible effects a resolution passed by the Council may have on the sanitary history of the future.

That these various bodies may understand the course events have taken, it is necessary to write in detail, and my remarks will be founded on :—

1.—The general principles which have guided the administration of Public Health Law in this town during the past 40 years.

2.—The Memorandum issued by The Local Government Board in November, 1908, as to Annual Reports of Medical Officers of Health, in which it is laid down that The Education (Administrative Provisions) Act, 1907, does not confer powers in supersession of those heretofore exercised generally in a public health sense by Sanitary Authorities under previous enactments, but is supplementary thereto

3.—Circular No. 576 issued by The Board of Education, November, 1907, in which The Board indicates that the County Medical Officer will be responsible for the smooth administration of the Act referred to, and will advise the Education Committee of the County Council.

4.—The Regulations for Managers and Teachers issued by the Staffordshire County Council, January, 1908, more particularly the six sections of Regulation 46 ; and schedule 1 which indicates that the payment of Head Teachers is based on average attendance of children at school.

5.—The Memorandum issued by The Local Government Board, January, 1908, on the circumstances under which the closing of Public Elementary Schools or the exclusion therefrom of particular children may be required in order to prevent the spread of disease.

6.—Section 126 of The Public Health Act, 1875, and a letter written to me in 1894 by The Local Government Board explaining the very limited power in the opinion of the Board, that section confers on the administrative Officers of Local Councils.

And—

7.—The trend of recent legislation on infectious diseases, as shown in section 57 of The Public Health Acts Amendment Act, 1907—an Act which however has not yet been adopted by the local Council.

To make matters more clear, The Urban District Council subject to the control of The Local Government Board is the paramount Sanitary Authority here; whilst The Staffordshire County Council is the Local Education Authority, subject to the control of The Board of Education; and it is my wish, if possible, to work in complete harmony with the Education Committee of the County Council and all their local staff of Teachers.

For upwards of 25 years prior to 1894, it was the custom here to advise "that all children suffering from any dangerous infectious disorder should be excluded from school" as long as they were believed to be in an infectious condition; and further, that "as it was rarely possible to provide effectual separation of the sick from the healthy within the homes of children of the class attending public elementary schools" it was also advised "that all children of an infected household should be excluded from school . . . . . because it is known that infection of certain diseases may attach itself to, and be conveyed by, the throat secretions or the clothes of a person living in an infected atmosphere, even though the person himself remain unaffected."

In 1894 there were concurrent epidemics in this town, of Small Pox, Measles and Whooping Cough, and although the advice above

referred to was given in every case, many children were sent to school, who, though themselves in good health came from infected households. As the Local Government Board held that the local Council, or at any rate its Medical Officer of Health had "no power to require parents or guardians of children to refrain from sending healthy children to school in cases where infectious disease appears in a house" it followed that either the Council had no power to prosecute, or having the power, it was inoperative because of the difficulty in proving that clothing exposed to the chance of infection, was actually infected.

Whilst however the Council had no power in 1894 to keep healthy children from infected houses away from school, the School Authorities had power under the Education Code to exclude them—but obviously they could not exclude children without definite knowledge and advice ; and towards the end of 1894 the Council increased my salary, upon the understanding that I would issue certificates of advice in each infectious case to the Head Teachers of elementary schools, and this was regularly done to the end of 1908.

Although the Teachers took a prominent part in 1894 in bringing about this change, the question was argued by me, solely as a means of securing more efficient sanitation, and I think I am justified in inferring, that upon any other hypothesis The Local Government Board and The County Council (which at that date was not the local Education Authority) would not have sanctioned an increase of salary.

In an indirect way however, the change in procedure secured until 1903 what came to be known as the "Epidemic Grant,' allowed under Article 101* of the Code of 1894 ; but this article having been abolished, the salaries of Head Teachers and also the grants in aid of education are based upon the average attendance of children at school—in other words an inducement is held out to keep up the school average attendance, irrespective of whether the children do or do not come from infected homes.

From 1895 to 1907 the Head Teachers rendered me great help in giving early information of suspected infectious diseases, and in most cases, they acted upon the advice tendered by me, and excluded

children from school, who lived in infected homes for periods defined by me. I have several times acknowledged my indebtedness to them for this help ; because I believe, that the great decrease in the fatality from infectious diseases was due far more to the system which came into operation at the end of 1894 than to any other single cause ; and I came to look upon that part of our sanitary organisation as far in advance of that which prevailed in most towns of similar, or even larger, size.

Whilst writing my last Annual Report, the Regulations issued to Managers and Teachers by the County Council in January 1908 came under my notice, and fore-seeing what was likely to happen soon, unless the Education Committee withdrew one of the regulations, I said in that Report, that it was not my intention to give advice according to the suggestions contained in the County regulations so far as Measles and Whooping Cough were concerned ; because I was satisfied that Measles and Whooping Cough might be conveyed by clothing, and because I had seen many children who beyond all doubt had had Measles several times.

The County Council Regulation referred to is No. 46, and it consists of six sections, and is said to have been compiled from the 3rd edition of "The Code of Rules for the Prevention of Infectious diseases in Schools" issued by the Medical Officers of Schools Association. Why the 3rd Edition, when the 5th was issued in 1904, I don't know.

It seems to me unfortunate, that this code of rules should have been selected at all, because the Medical Officers referred to consist entirely of the Officers to the great public schools, such as Eton and Rugby, where the boys enter at 13 and leave at 19 ; where probably 95 per cent or more are Boarders ; where all the boys and their life history are known to the Medical Officers ; where the boys are attended when ill, in the main by the same Medical Officers ; and above all where in most cases the means for quarantine and isolation are ample and complete. A system which would work well at such schools is absolutely impossible to work in towns like this ; where children go to school at 3 and leave at 14 ; where there is no Isolation Hospital ; and where, although we have an excellent steam

disinfector, it is known to all who know how the people live in industrial towns, that effectual disinfection of clothing exposed to the infection of Measles and Whooping Cough is an impossibility on a large scale.

The upshot of the issue of this regulation is that it is liable to be, and has been, seriously misinterpreted; and that it has led to a movement which resulted in the passing of the following resolution by the local Council on January 4th, 1909: "That on the recommendation of the Sanitary Committee for the next twelve months it shall not be the Medical Officer's duty to furnish such certificates as have hitherto been supplied to School Authorities in respect of Scholars excluded from Schools by reason of infectious disease."

As I regard the passing of this resolution as a decidedly retrograde step in sanitation, I feel it to be my duty to speak out boldly; because I am aware there is also a financial side to the question, and Councillors often more quickly grasp the financial, than the sanitary, side of it.

In my opinion the County rule as it stands is unworkable in this town so far as some infectious diseases are concerned, and with this opinion, one of the best and most experienced of The Medical Officers of Schools Association is in complete agreement.

I have before me the 5th edition of the code of rules referred to, and the forms of certificates recommended by the Association for use in connection with all cases of infectious illness and exposure to infection; and also the 4th edition issued in 1905 of a work on health at school in which the same Medical Officer writes that "while zymotic diseases are most frequently conveyed from the sick to the healthy, there can be no doubt whatever, that all infectious diseases are communicable by means of the clothes of persons" who come from infected homes, and he lays it down that the period of quarantine necessary while the healthy individual remains in the same house with the sick person should be fully as long as I am in the habit of advising in the case of Measles and Whooping Cough.

Now as regards the misinterpretation of the County Regulation, this is how it has been read by some, if not most of the Teachers:— Regulation 46, section 2: "Children who have previously suffered

from either Measles or Whooping Cough, but who are then free from the disease, may attend school although they may come from houses in which cases exist," therefore, they may come from houses where there is infectious disease, although it is laid down by the Local Government Board that "the infection of certain diseases may attach itself to, and be conveyed by . . . . . the clothes of a person living in an infected atmosphere," and that it is the duty of the Medical Officer of Health "to give such advice as appears to him to be necessary with regard to the exclusion of the children from school, and as to the time for which such exclusion should continue."

If however the footnote to the Table in section 3 of the same Regulation 46 be read, and the remarks in the third column of the Table be noted, sections 2 and 3 construed together will read, "Children who have previously suffered from Measles or Whooping Cough, but who are then free from the disease, may attend school although they may come from houses in which cases exist," but "complete disinfection of the person and of the clothing must be carried out at the termination of the period of Isolation or of Quarantine," and in the case of Measles "the quarantine, after exposure to infection, is 16 clear days," and in the case of Whooping Cough "21 clear days."

As by the Association code of rules, "Isolation means the continued separation of the infectious patient from the healthy until after he has ceased to be infectious," and "Quarantine means the similar separation of a *possibly* infected person until after the termination of the period at which he would (if infected) have developed characteristic signs of the disease in question," and as neither satisfactory isolation nor satisfactory quarantine can be obtained in the homes of the great majority of children who attend the elementary schools in this town, and as it is impossible here to secure complete disinfection of the clothing of children who have been exposed to possible infection by Measles or Whooping Cough, I think I am absolutely justified in saying, that Regulation 46 is unworkable here, and that the Medical Officer of Health on the spot is, or ought to be, the best judge as to the time for which exclusion of children from school should continue.

To bring the matter home more forcibly, I have compiled the following Table from documents in my possession.

Mean Population in Years.	Mean Zymotic Death Rate.	Number of Deaths from Measles of persons under 15 years old.	Number of Deaths from Whooping Cough of persons under 15 years old.	Number of Deaths from Scarlet Fever of persons under 15 years old.	Total Deaths from all causes of persons over 1 and under 15 years old.
1905—1908 19,484	1·6	23	24	9	226
1900—1904 18,691	2·5	66	40	13	368
1895—1899 17,833	3·3	63	49	10	336
1890—1894 17,168	3·6	54	91	22	426
1885—1889 17,092	3·0	54	80	13*	385
1880—1884 16,160	4·5	41†	71†	138†	494
1875—1879 15,999	4·9	30§	64§	139§	545

* The returns in detail for years 1885—8 are missing. The total deaths from Scarlet Fever in years 1885—1889 were 14, one of whom was over 15 and has been deducted. It is extremely probable all the others were under 15.

† The returns in detail for years 1883—4 are missing. In the years 1880—1882 there was no death over 15 from Measles, Whooping Cough or Scarlet Fever. It is practically certain there was no death in 1883—4 over 15 from Measles or Whooping Cough, and extremely probable there would not be more than 1 death from Scarlet Fever over 15.

§ The complete returns for the first 3 months of 1875 are missing. It is practically certain there was no death over 15 in that 3 months from Measles or Whooping Cough, and extremely probable there was no death over 15 from Scarlet Fever, or at most one only. The aggregate deaths under 15 are—subject to these very slight possibilities of error—correct.

A careful examination of the fore-going Table reveals the following facts :—

1.—That the mean annual zymotic death rate from the seven principal diseases has fallen in each period since 1895, and that in each period it was lower than in any period in the preceding 20 years—except in that which ended 1889

2.—That whereas the average zymotic death rate from the seven principal diseases in the 20 years ended 1894, when the new system came into operation, was 4·0 per thousand per year, in the last 14 years it has averaged 2·5. Reduced to plain English this means that if the zymotic death rate had remained in the last 14 years, what it was in the preceding 20 years, the lives of 409 persons would have been lost from these seven causes, the great majority of whom would have been children ; and as these 409 persons have lived, most of them have inevitably gone to school and sent up the average of school attendance, to say nothing of their potentiality in that direction in the next generation.

3.—In like manner, whereas the average annual death rate in the 14 years ended 1908 from Whooping Cough of persons under 15 years old was 0·43 per thousand per year, and it was 0·92 in the 20 preceding years, it follows that reduced to plain English the lives of 128 persons under 15 years old have been saved in the past 14 years from this cause alone.

4.—In like manner, as the mean annual death rate from Scarlet Fever of persons under 15 years old in the 14 years ended 1908 was 0·12 per 1000 per year, and it was 0·93 in the 20 preceding years, it follows that reduced to plain English the lives of 216 persons under 15 years old have been saved in the past 14 years from that cause alone.

5.—As regards Measles, as the mean annual death rate from that cause of persons under 15 years old in the 14 years ended 1908 was 0·58 per 1000 per year, and it was 0·53 in the 20 preceding years, it follows reduced to plain English, that whereas 152 actually died from that cause under 15 years old in the 14 years ended 1908, only 138 would have died had the death rate from Measles remained as it was in the preceding

20 years—that is to say there has been an increase of one death per year from this cause in the last 14 years.

6.—Thus of the 409 lives saved from the seven principal zymotic diseases in the 14 years ended 1908, it appears that 128 were saved from death from Whooping Cough and 216 from death from Scarlet Fever under 15 years old, making a total of 344, whilst an excess of 14 deaths from Measles reduces the number to 330—that is to say, of the 409 lives saved at all ages from the seven principal zymotic diseases, no less than 330 were saved by the prevention of the three most common and most troublesome diseases of school life.

I therefore respectfully suggest full consideration of the following points by the various Authorities concerned :—

1.—That a dual system of advice, as between the local Medical Officer of Health and the Education Committee of the County Council is not desirable, so far as infectious diseases are concerned.

2.—That County regulation 46 should be with-drawn or made plainer, except sections 5 and 6.

3.—That School Attendance Officers, Teachers or their emissaries, should be absolutely prohibited from sending for children to come to school from houses where there is infectious disease, contrary to the advice of the local Medical Officer of Health.

4.—That if it be true that the average attendance is reduced here more than at other parts of the County by the advice of the Medical Officer of Health, it is because there has been a better organisation here during the past 14 years for obtaining early information of infectious cases and thus securing exclusion of children from school ; and the remedy would appear to be to bring other places up to our level in this particular, and not to take us down to their level.

5.—That the salaries of Head Teachers should be equitably so fixed, that if they do their duty, they shall be at no loss by reason of epidemic sickness, which they can't help—for instance, take the County scale of payment to Male Head Teachers in Mixed Departments ; if the average attendance

at school is 252 they are paid at the rate of £170 rising to £210, but should the average fall to 250 by reason of epidemic or other sickness they are paid at the rate of £140 rising to £180. Making full allowance for the re-grading of schools as explained in Schedule 1, section 5 (a) it seems to me that "To put the matter shortly, a premium is now offered to keep the school attendances up at all costs, by compelling the attendance of children who may be found at the time to be suffering from doubtful illness, and whose presence in a class or school may cause the spread of infectious disease."

6.—If the Education Grant is to continue to be paid on the basis of average attendance, it is far better that the town as a whole should receive a smaller Grant, than that the townsmen in their private capacity should be called on to spend their own money for physic, nurses, coffins, graves, Belgian-horse trappings and other luxuries of grief.

And lastly—That it is desirable to return to the old system, or alternatively to adopt the 57th section of the Public Health Acts Amendment Act, 1907 as speedily as possible.

The deaths from Pulmonary Consumption were 25 and from all forms of Consumption 38, equal to rates respectively of 12·7 and 19·3 per 10,000 persons living, expressed to the nearest half unit. The main requirements for the prevention of Consumption are a plentiful supply of pure fresh air, sunlight and avoidance of the dried expectoration of consumptive persons and as far as possible of infected milk and meat. On January 1st the "Public Health (Tuberculosis) Regulations 1908" came into force in the District. The Regulations provide at the expense of the Council for the certification to the M.O.H. of cases of Pulmonary Consumption amongst the inmates of Poor Law Institutions, or amongst persons under the care of (Poor Law) District Medical Officers; and it will be the duty of the M.O.H. to consider—within certain limits—whether anything can be done to prevent other persons catching the complaint. If the Council desire it, I shall be pleased to draw up a hand-bill or poster for general circulation on the subject.

The Steam Disinfector was worked on 98 days, and 668 articles

were disinfected. One hundred and fifteen houses and two schools were disinfected.

With regard to properties on which reports were made during the year and in previous years, the Sanitary Inspector informs me that Mr. Griffiths' premises, Market Place; 104 Union Street; 54 Walsall Street; St. Anne's Terrace; Mr. Bailey's house, Rose Hill; 7 Albion Street; Court 3, Walsall Street; and 16 High Street have been put in order to the satisfaction of the Council; that Nos. 90 and 93 High Street have been closed in accordance with the terms of bye-law 88 relating to buildings, as unfit for human habitation; that all the houses in Gomer Street have now been connected with the sewers; that plans have been passed to connect 61 Wednesfield Road, and the work is about to be done; that a Magisterial Order has been obtained to compel proper connection of Nos. 50 to 53 and a house at the rear thereof in Wednesfield Road with the sewers; that Nos. 20 and 21 Cross Street have been put in order to the satisfaction of the Council, except that the ashpit has not been covered; that Mr. Cash's cowshed has been rebuilt; that 99 houses, making a total of 3483, were connected with the sewers; 2 houses were demolished; 18 new houses were built; 34 ashpits were abolished and galvanized bins substituted; and that 46 privies were converted to water closets.

The house refuse is removed by the Council's men and has been satisfactorily done; the dust bins being emptied once a week in the day-time. Where the old conservancy system remains, removal is effected in the night. Five thousand, seven hundred and thirteen loads of refuse were carted to the tips.

Granville Street, Clothier Street, Regent Street, and Primrose Street have been properly made and taken over by the Council. Stone Street is about to be made under the Private Street Works Act, 1892, preparatory to being taken over; and the Council have approved the Surveyor's scheme for putting several short streets off Bridge Street and Brick-kiln Street into a proper condition, with a view to taking them over. No plans were submitted for new streets. Monday Alley, Mount Pleasant, Villiers Street, Forge Street, School

Street, Chapel Street, and Bennett Street are still not properly made, and have not been taken over.

No sewer extensions have been made, but a storm water overflow chamber has been constructed on the Walsall Road Main Sewer, which comes into operation when the volume of sewage is increased to six times the dry weather flow. It remains to be seen whether this will be sufficient to permanently prevent basements in the Walsall Road becoming flooded with sewage-laden water in times of exceptional storm.

There are 350 workshops on the register, of which 96 are void. Fifteen workshops were demolished. Four hundred and twenty seven inspections of factories and workshops were made, chiefly by the Sanitary Inspector, resulting in the removal of 3 nuisances and the limewashing of 42 shops. Twenty eight other shops were found to need limewashing, and probably by now most of these have received attention. There are out-standing nuisances to be abated at 7 Market Place and 17 Bloxwich Road. Section 22 of the Public Health Acts Amendment Act, 1890, is in force, and the standard of sanitary convenience aimed at, is the provision of one for every 25 of each sex employed. Unsuitable sanitary accommodation at 38 Union Street not having been remedied, plans have been submitted and a Magisterial Order obtained to substitute water closets. There are no workshops having wet floors; there is no under-ground bake-house in use; a gut scraping business was started attended with the usual nuisance of the trade, but notices of abatement resulted in the speedy closing of the place. Eighteen Out-workers' Lists, showing employment of 149 men, were received twice in the year, and 7 Lists showing employment of 25 men once only in the year. The addresses of 21 out-workers were sent to other Councils, and the addresses of 2 out-workers were received from other Councils; 45 out-workers' premises were inspected; no prosecution other than that already referred to was undertaken; there was no out-work in unwholesome premises; nor on infected premises; but a woman employed as a tailoress, suffering from Erysipelas was advised not to go into a workshop in Cross Street until quite well, and satisfactory isolation was secured on a tailor's premises in

Cemetery Road, where there was Scarlet Fever. The Factory Abstract was posted up in every case where it was legally required except one, and this omission has since been complied with.

When my last Annual Report was written, experiments were in progress, which it was thought might end in the production of a satisfactory enamel glaze to iron castings, without the use of any material injurious to the enamellers. These experiments having ultimately proved a failure, Messrs. J. Harper & Co., Limited, have secured the sole right to use a French Patent in this Country, or to permit its use by others by arrangement with them. About September, two of these patent enamelling machines were fitted in their works, and a third is in process of erection. The Patent consists of an iron cone, with receiving apparatus at its bottom, which collects the un-used enamel powder. At the top of the cone is a perforated table, with studs thereon, on to which the articles from the muffle are placed to be enamelled. This table can be easily moved to any angle when the casting is on it, by a mechanical contrivance. Over the casting is a sieve which contains many pounds of enamelling powder, and this is set in motion by an ingenious electric apparatus, worked by foot-lever, and the motor power can be easily turned off or on, whilst the enameller moves the table to the required angles. The enamel sieve can be agitated gently or violently at will, either by 2 or 4 electric agitators. The working parts are inclosed in a glass frame, which is easily moved by a revolving disc and pinion operated from the outside, and a wide iron pipe is carried through its centre, a great many feet upwards into the outer air. The general effect is that the castings are put through a sort of slot on one side, whilst the other three sides and roof are closed in by glass; the sieve is set in motion, and the hot casting dusted much more quickly and more effectually than it can be by hand; and, as there is only one air inlet and that on the side on which the enameller's assistant stands, the generated dust is blown away from the workmen and ultimately falls down the sides of the cone into the receiver, or rises through the pipe and is discharged into the outer air, without the use of any exhaust ventilator within the pipe. Whilst the result is a better enamel glaze than can be

got by hand, a better regularity of shade ts obtained, and a saving of enamelling powder effected. I have examined the workmen every third week, and so far there has been a distinct improvement in their general appearance and health ; in fact there has been no sign of lead poisoning, and at my last visit there was not even a small deposit of lead sulphide on the teeth of any one of them—a most unusual thing in my experience. At present only about 70 per cent. of the articles which have to be enamelled can be enamelled in this way, and those chiefly the larger and heavier articles ; but holders are being gradually made for enamelling the smaller articles by the dozen, instead of singly, in the apparatus described ; so that ultimately a larger per centage will be so enamelled. It is however believed, that there will always be a certain number of articles which will have to be enamelled by hand. It is too early yet to predict this Patent will entirely prevent lead poisoning, but the results obtained are distinctly encouraging.

The special regulations for file cutters were satisfactorily observed ; nevertheless a very severe case of lead poisoning in a file cutter came under observation. The Council of The Royal Institute of Public Hcalth, having invited me to read a paper in the industrial section at the Congress held at Buxton in July, I selected as my subject, industrial lead poisoning. In that paper, I utilized the case referred to, as an illustration of several cases of *deferred* poisoning by lead, wbich have come under my notice, cases likely to be of importance both to masters and men, now that the Workmen's Compensation Act applies to industrial lead poisoning. In this case there were no symptoms of lead poisoning until after the man had ceased to work eight days as a file-cutter, and the symptoms were much more marked four months after he had ceased to work, than they were 14 days after, when I first saw him. This means the lead was in the man's body when he left off work, although there was no indication of poisoning by lead, and that it did not manifest itself in harmful form until something else had lowered his vitality. When this happened the symptoms became progressive in severity, though there was no fresh introduction of poison into his system.

Fresh regulations for the casting of brass and other metallic alloys will come into force on January 1st, 1910. As these new rules may involve structural alterations in factories, it is necessary that brass casters should obtain full information of their nature.

Since the Council issued a letter to manufacturers on Smoke Nuisance in 1907, one Firm has dispensed with its 50 horse power steam engine and substituted electric power. So far they are satisfied with the results obtained, and the air round their works is much cleaner and purer. There are still, however, many engine stacks and annealing oven chimneys, especially at the east end of the town, from which dense smoke is emitted during a great part of the day, to the great discomfort, injury, and loss of residents in the neighbourhood; and, unless the nuisance should in the near future be abated, children, who will attend the Albion Road Council Schools when erected, will be compelled to breathe much of that smoke, because the schools will be situated in the direct line of one of the two most prevalent winds experienced here.

I cannot discuss this subject as a scientific engineer; but, having made numerous inquiries, I desire, through the Council, to appeal to the manufacturers to think over the matter and show their public spirit; to put themselves in touch with expert scientific engineers; and to convince themselves that the prevention of unnecessary smoke is a duty they owe to their neighbours. If they will only take the trouble to do this, and they should still find it necessary to use steam power in their works in preference to gas or electric power; and I can only induce them to approach the subject from the humanitarian standpoint, I am convinced that they can, by expert mechanical appliances, not only do away with nine-tenths of the nuisance, but in addition secure large profits by savings in the consumption of coal. Before arriving at this conclusion I have corresponded with Messrs. Vicars', manufacturers of Vicars' Patent Automatic Smokeless Mechanical Stoker, Earlestown, Newton-le-Willows, Lancashire; Messrs. Meldrum Bros., Limited, Timperley, near Manchester, who say their Koker Stokers are a certain cure for smoke, and that they are willing to guarantee it; Mr. J. T. Thornton, manufacturer of Hinchcliffe's Patent, Atlantic Oil Works,

Paddock, Huddersfield; Messrs. Thomas Cass & Co., Limited, Cass Stoker Manufacturers, St. George's Street, Bolton; and Mr. Hope, the inventor of the Eclipse Economiser, a new invention just patented, sold by The Eclipse Boiler Furnace Limited, 155 Dashwood House, New Broad Street, London, E.C., of which I have read excellent accounts, and which consists of a gas-producer, which delivers at the far end of the furnace and behind the coal fire a volume of gas which, mixed with air delivered by a second pipe, sets up a further combustion, producing incandescence. The smoke from the fire in passing through this intensely hot flame is said to be absolutely burnt up before it can reach the chimney shaft.

None of the gentlemen referred to are known to me; and any letters or specifications in my possession may be seen by any manufacturer who desires to see them.

There is a very general movement on foot designed to strengthen the law in the direction of the prevention of nuisance from smoke, and next month there will be a practical conference on the subject at Sheffield, extending over three weeks.

To press the matter home I append a series of extracts from the writings of Mr. Graham, Principal of Dalton Hall, Manchester; Mr. A. E. Fletcher, late Chief Inspector under the Alkali Acts; Bibby's Annual, an unconventional journal designed "to give expression to thoughts and ideas which the Editor believes will contribute to social advancement"; and the letters of persons with whom I have corresponded.

I take as my text, that smoke from engine stacks is almost always due to un-intelligent stoking or insufficiency of boiler power.

Mr. H E. Fletcher says "It may with confidence be asserted that consumers of coal in almost all kinds of furnaces have it now in their power to conform with the requirements of the Public Health Act and prevent the discharge of black smoke from their chimneys."

Messrs. Crosfields, Warrington, "have 23 boilers fitted with Vicars' Stoking Cokers . . . . . they achieve smokelessness nearly all the time, and save a thousand tons of coal per week, or £25,000 a year, compared with their unregenerate days" . . . . "they have a special way of setting their boilers so that the gases

travel the length of the boiler three times and then through the super-heating chamber twice before they pass up the chimney."

Messrs. Bibby, Liverpool, say that "with eleven boilers fitted with Vicars' Mechanical Stokers, induced draught and other appliances . . . . . they have effected a saving of 140 tons of coal a week, although doing more work . . . . . the cost of labour in feeding the boilers, superintendence and upkeep has been reduced fully £20 a week" . . . . . which, with further savings . . . . . "figures out at about £5,000 a year."

At the Birmingham General Hospital "Vicars' furnaces are in use giving quite satisfactory freedom from smoke," . . . . . "and £400 was saved in the first year."

Messrs. Vickers, Son & Maxim, Barrow, "save 10 per cent. on their coal bill, and at the same time gain 40 per cent. of power" by the use of electrical power.

"In the Denaby and Cadeby Collieries two boilers suffice for what formerly took six."

"Devices which introduce a strong draught of hot air into the furnace all the time" are more thorough—Hinchcliffe's Patent, and, as at Mr. Marshall's, Oldham.

"Hot air blasts are particularly useful where poor coal is burnt"—as for instance, here.

It is estimated that the cost of smoke and fog in large towns represents £1 per head per year.

"Fogs are more rapidly formed and more persistently maintained in the presence of coal smoke, than in ordinary country air."

After fog in industrial towns, there is always an increase in the number of throat and lung affections, and "a large part of the illness and death is caused by the soot passing into the breathing tubes and producing bronchitis; the delicate membranes of the lungs become clogged and inflamed with sticky soot, and so become diseased."

"Authorities agree that to obtain the best boiler duty and to avoid smoke the fuel should be fed on to the front of fire in small charges frequently, and the fire pushed back preparatory to stoking. This is turning the man into a coking stoker, and is a very hot task and a very hard one. We go on therefore, by a natural

transition to the more drastic machinery by which the firing is done by hands of iron, and the furnace door kept shut."

With regard to house accommodation for the working classes, the houses are sufficiently numerous, but many of them are far from being what one could wish for. The economic side of the matter is that unskilled workmen abound, who can't afford to pay in times of good trade more than they now do for rent, whilst in times of bad trade many landlords benificently provide shelter for families because much of the rent remains unpaid, though they still have to pay rates and taxes and are expected to keep their property in good sanitary order. Some years ago, before the tramways were laid, I indicated how dangerous tram traffic would be in Walsall Street if trams were permitted to run. The recent widening of a part of the street and demolition of old property has effected a great improvement. There is still danger higher up the street, and the sooner the Courts and old property adjacent can be abolished or rebuilt and the street again made wider the better for the health of the town. Much of the property at Portobello needs constant attention, and will no doubt become too dilapidated for human occupation within the next few years.

No food exposed for sale was condemned as unfit for consumption ; but meat of very doubtful quality having several times been exposed for sale on a stall in the Market Place, I privately cautioned the Vendor and gave instructions that the stall should be regularly watched for some time to come, and the result was an improvment in the quality of meat thereafter sold.

There are a few cowsheds in the District, but most of the milk supply is from rural or semi-rural districts near at hand, though some of it comes from a distance by rail.

The water supply is from the Wolverhampton Corporation mains, obtained chiefly from Artesian Wells sunk in the New Red Sandstone, but supplemented by filtered river water. There have been more complaints of its turbidity this year than I have ever had before. The Engineer attributes this to the lowering of the water in the reservoir during frost and subsequent thaw combined with such a demand for water that it was drawn as rapidly from the reservoir as it was pumped in, with the result that the

temperature of the comparatively small quantity of water in stock was higher than it would otherwise have been, consequently causing an earlier growth of weeds than usual, which decaying rose to the surface and caused discolouration of the water and imparted to it an unpleasant odour. To remedy the matter in part the mains were constantly flushed—but beyond that it seems to be essential that a larger reserve of water is necessary to be kept in stock.

Two hundred and fifty four children were successfully vaccinated; 175 exemption certificates were obtained under the new law; two persons were re-vaccinated successfully; three certificates of insusceptibility of vaccination were given; the vaccination of six was postponed; and 65 died without having been vaccinated. These figures seem to indicate a desire on the part of the people to face the horrors of another epidemic of Small Pox.

Four hundred and fifty seven certificates were issued to Elementary School Teachers advising exclusion from school for defined periods for various causes, involving exclusion also of 511, who were not themselves ill.

Most of the Elementary Schools are excellent modern buildings. The Wesleyan Schools and the Russell Street Council Schools are about to be replaced by one large school in Albion Road. St. Giles' New Schools (Mixed Departments) were opened at the end of the year. It is doubtful whether there is a better school premises in the County.

It is desirable to do away with some of the street sewer-gratings and substitute tall cast-iron sewer ventilators, provided that suitable ventilating sites can be found, so placed that no nuisance will accrue to occupiers of adjacent buildings. I understand your Surveyor has this matter under consideration.

I advise the Council to invariably use their powers, should there in future be any breach of bye-law 11 relating to nuisances. Many complaints were received of such a nuisance from residents in The Crescent.

By the Midwives Act no woman will be permitted to attend women in childbirth for gain, except under the direction of a Doctor, unless certified as a Midwife, after April 1st, 1910; and

by the same Act every Midwife is bound to send for a Doctor in certain circumstances, and there, her legal responsibility ends. The Act however does not provide for the payment of the Doctor, and no Doctor is obliged to go unpaid to any case ; and it is already a matter of common experience that if Doctors do go to the Midwife's assistance, they frequently do not get paid. The Privy Council issued a Circular in February 1908 to Guardians advising that "it is competent to the Guardians to pay the fee of *any* medical man called in on the advice of a midwife to attend upon a poor person in case of difficulty." The Wolverhampton Guardians have so far declined to act on the advice of the Privy Council ; and beyond that, it seems fairly certain that even should there be a sufficiency of certified Midwives in this town by April 1st, 1910 to replace the women who have acted as such in the past, there is no reasonable probability that they will be able to support themselves on such fees as the replaced women have hitherto been paid, nor that the poor will be able to pay more than they have hitherto done either to Midwife or Doctor. The remedy seems to lie in an amended Act to be passed and become law as soon as possible.

A meeting has been held to ventilate the subject, and expert Nurses have addressed the local Nursing Association, at which several Councillors and Guardians were present, and I was asked to indicate the needs of the town. It is too early yet to speak with confidence, but it seems probable that before long a trained certified Midwife will be provided for such cases as have hitherto been attended by the women about to be replaced, and should she be experienced and possess tact, such a woman might be a potent factor in educating mothers, especially young mothers, in the management of their infants.

The Notification of Births Act has not been adopted—but the Council has asked me to propose a scheme for their consideration.

The Public Health Acts Amendment Act 1907 is in my opinion a most important Act, which the Local Government Board may declare to be in force wholly or partly on application by the Council. I advise the Council to consider it carefully and to adopt most if not all the sections in Parts 2, 3 and 4, and as regards Part 2 to confer with your Surveyor, and as regards Parts 3 and 4

to ask your Clerk to confer with me, prior to giving your decision.

All but two of the deaths were certified by Doctor or Coroner.

The Tables required to be filled up by the Local Government Board, the County Council and the Home Office will be forwarded, and in substance are appended hereto. At the End of the year there were 78 Formal and 72 Informal Notices not complied with

I am, Gentlemen,

Yours obediently,

JOHN T. HARTILL.

M. O. H

Willenhall,

February 15th, 1909.

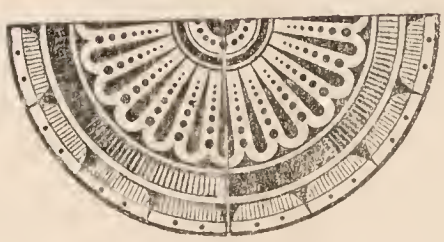

Table 1.

Vital Statistics for 1908 and Previous Years.

Year.	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.	
				Under 1 Year of Age		At all Ages.						
		Number	Rate*	Number.	Rate per 1000 Births registered	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1898	18000	717	39·8	149	207·8	392	21·7			9	401	22·2
1899	18170	650	35·7	127	195·3	371	20·4			14	385	21·1
1900	18342	697	38·0	118	169·2	340	18·5			18	358	19·5
1901	18515	656	35·4	139	211·8	365	19·7			13	378	20·4
1902	18731	654	34·9	99	151·3	294	15·6			23	317	16·9
1903	18868	633	33·5	102	161·1	345	18·2			31	376	19·9
1904	19001	643	33·8	108	167·9	349	18·3			34	383	20·1
1905	19179	591	30·8	82	138 7	261	13·6			34	295	15·3
1906	19460	589	30·2	97	164·6	317	16·2			45	362	18·6
1907	19613	615	31·3	85	138·2	248	12·6			29	277	14·1
Averages for years 1898-1907	18788	644	34·3	111	170·5	328	17·4	0	0	25	353	18·8
1908	19684	576	29·2	92	159·7	281	14·2	0	0	46	327	16·6

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

By the term "Non-residents" is meant persons brought into the District on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the District on account of sickness or infirmity, and have died in public institutions elsewhere.

Area of District in acres ... 1249

Total population at all ages	18515	At Census of 1901
Number of inhabited houses	3614	
Average number of persons per house	5·1	

Table 2.

LOCALITIES.

Not filled up, as there are no recognised divisions of known population.

Table 3.

Cases of Infectious Diseases Certified or Notified during the year.

	At all Ages	At Ages—Years.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upw'ds
Diphtheria ...	22	1	8	10	2	1	...
Erysipelas ...	14	...	...	...	...	9	5
Scarlet Fever ...	107	2	41	57	2	5	...
Enteric Fever ...	8	...	...	4	...	4	...
Totals ...	151	3	49	71	4	19	5

Cases of Non-Notifiable Infectious Diseases in same period.

	At all Ages	At Ages—Years.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upw'ds
Measles ...	12	2	4	6	...	...	...
Chicken Pox ...	147	10	54	83	...	...	...
Whooping Cough	171	18	93	60	...	...	...
Mumps ...	50	...	7	43	...	...	...
Diarrhœa ...	37	13	12	1	...	11	...
Influenza ...	39	...	1	1	5	30	2

Table 4.

CAUSES OF, AND AGES AT, DEATH.

Causes of Death.	Deaths in or belonging to whole District at subjoined Ages.							Total Deaths in Public Institutions in the District.
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	
Small-pox								
Measles	1	1						
Scarlet Fever	4		3	1				
Whooping-cough	5	3	2					
Diphtheria and membranous croup	7	2	3	2				
Croup	3		2	1				
Fever (Typhus ... ... / Enteric ... ... / Other continued ...)	1					1		
Epidemic Influenza	9					5	4	
Cholera								
Plague								
Diarrhœa	8	5	3					
Enteritis	6	4	2					
Puerperal Fever...								
Erysipelas								
Other Septic Diseases								
Phthisis	25		2		4	19		
Other Tubercular Diseases ...	13	5	6	2				
Cancer, malignant disease ...	17					8	9	
Bronchitis	34	5	3			13	13	
Pneumonia	17	7	3		1	5	1	
Pleurisy								
Other Diseases of Respiratory Organs	2			1	1			
Alcoholism ... ... / Cirrhosis of Liver	5					5		
Venereal Diseases	1	1						
Premature Birth	12	12						
Diseases and Accidents of Parturition	3				2	1		
Heart Diseases	14				5	5	4	
Accidents...	3	1	1	1				
Suicides	2					2		
All other causes	135	46	10	3	2	26	48	
All causes	327	92	40	11	15	90	79	0

Table 5.

INFANTILE MORTALITY.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
ALL CAUSES.	Certified	7	5	10	3	25	24	9	9	4	3	3	3	2	2	4	2	90
	Uncertified	1		1		2												2
Common Infectious Diseases.	Small-pox																	
	Chicken-pox																	
	Measles								1									1
	Scarlet Fever														1		1	2
	Diphtheria : Croup ...																	3
	Whooping Cough ...						1				1	1						
Diarrhœal Diseases.	Diarrhœa, all forms ...							1			1		1			2		5
	Enteritis *(not Tuberculous)*						1			1			1					3
	Gastritis, Gastro-intestinal Catarrh				1	1												1
Wasting Diseases.	Premature Birth ...	6	2	4		12												12
	Congenital Defects ...																	
	Injury at Birth																	
	Want of Breast-milk ...						1	1										2
	Atrophy, Debility, Marasmus		3	6		9	10	2	4									25
Tuberculous Diseases.	Tuberculous Meningitis ...															1		1
	Tuberculous Peritonitis : Tabes Mesenterica						2		2									4
	Other Tuberculous Diseases																	
	Erysipelas																	
	Syphilis																1	1
	Rickets																	
	Meningitis *(not Tuberculous)*							1		1		1		2				5
	Convulsions	2				2	4	1	1									8
	Bronchitis						2	1				1	1					5
	Laryngitis																	
	Pneumonia				1	1	3	1			1					1		7
	Suffocation, overlaying ...							1										1
	Other Causes			1	1	2			1	2					1			6
		8	5	11	3	27	24	9	9	4	3	3	3	2	2	4	2	92

Births in the year { Legitimate ... ... 552; Illegitimate ... ... 24 }

Deaths in the year { Legitimate infants ... 86; Illegitimate infants ... 6 }

Population 19,684

Deaths from all causes—inclusive of those in public institutions outside district 327

Table 6.

Summary of Work by Inspector of Nuisances partly under my supervision.

	Inspections made.	Informal Notices.	Formal Notices.	Number of Nuisances.	Nuisances abated after Informal Notice.	Nuisances abated after Formal Notice.
Dwelling Houses and Schools — Foul Conditions ...	931	28	1	28	14	
Dwelling Houses and Schools — Structural Defects ...		61	2	62	34	
Dwelling Houses and Schools — Overcrowding ...		33	7	33	21	5
Dwelling Houses and Schools — Unfit for Habitation		2	1	2	1	1
Dairies, Milkshops and Cowsheds ...	57	2		2	2	
Bakehouses	45	5		5	5	
Other Workshops and Factories ...	427	76	1	77	44	
Slaughter-houses	87	1		1	1	
Ashpits and Privies	708	59	59	60	26	34
Deposits of Refuse and Manure ...	78	25		25	21	
Water Closets	257	82	18	93	58	15
House Drainage — Defective Traps ...	22	4	3	8	5	3
House Drainage — No Disconnection ...	27	20	20	20	1	7
House Drainage — Other Faults ...	209	86	24	86	57	13
Water Supply	7	4		6	5	
Pigsties and Animals improperly kept	39	14		14	10	
Smoke Nuisances	13	2		5	2	
Other Nuisances	101	89	9	91	62	8

Seizures of Unwholesome Food	0
Condemned as Unfit for Food	0
Sample of Water taken for Analysis	0
„ „ condemned as unfit for use	0
Lots of Infected Bedding Disinfected	668
Houses Disinfected after Infectious Disease	115
Schools „	2
Formal Notices in 1904, 1905 and 1906 complied with in 1908	9
Formal Notices in 1905, 1906 and 1907 not yet complied with	20
Formal Notices in 1908 not yet complied with, covering several defects, but in most cases nuisances about to be abated	58

Table 7.

Shewing Certificates to Elementary School Authorities advising exclusion of Scholars from infected houses for specified periods during the School year ended November 30th, 1908, including those granted in the previous School year, the effect of which had not expired on December 1st, 1907.

	Certificates of Infected Persons.	Healthy Absentees.
County Council Schools, Little London	47	66
,, ,, ,, Portobello ...	103	144
,, ,, ,, Central ...	64	54
,, ,, ,, Walsall Road	38	38
,, ,, ,, Russell Street	52	64
St. Giles' National Schools	78	64
St. Anne's ,, ,, ...	8	0
Wesleyan Methodist ,, ...	49	64
St. Mary's Catholic ,, ...	18	17
TOTALS	457	511

Table 8.

Abstract of Particulars asked for by Home Office.

Factories—Inspections	41	Notice ...	1
,, ...	—	Prosecution	1
Workshops—Inspections	386	Notices ...	5
Homeworkers' Premises—Inspections	45	,, ...	0

Defects found :—

Want of Cleanliness	70	Remedied ...	42
Other Nuisances	3	,, ...	1
Defective Sanitary Accommodation	2	,, ...	1
Breach of Sanitary requirements in Bakehouses	1	,, ...	1
Defects brought forward from 1907	2	,, ...	0
	partly	,, ...	1

Other Matters :—

Notified by H.M. Inspector	17
Reports to H.M. Inspector	1
Underground Bakehouses in use	0

Homework :—

Lists received	once ...	7	Outworkers ...	25
	twice ...	18	Outworkers ...	149
Addresses forwarded to other Councils				21
,, received from ,, ,, ...				2

Workshops on Register at end of 1908—350. Occupied 254

Chief Trades therein —

Lock, Key and Latch Manufacture...	130
File Cutting	12
Other Hardware Manufacture	10
Articles of Dress	18
Workers in Wood and Iron	38
Bakehouses	21
Sundry Trades	25
Void—General Trades	91
Void—Bakehouses	5
Demolished	15